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(54) **DISPLAY WITH MULTILAYER AND EMBEDDED SIGNAL LINES**

(75) Inventors: **Shih-Chang Chang**, Cupertino, CA (US); **Cheng-Ho Yu**, Cupertino, CA (US); **Abbas Jamshidi Roudbari**, Sunnyvale, CA (US); **Ting-Kuo Chang**, Cupertino, CA (US)

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(73) Assignee: **Apple Inc.**, Cupertino, CA (US)

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Primary Examiner — Richard Kim

Assistant Examiner — Kendrick Hsu

(74) *Attorney, Agent, or Firm* — Treyz Law Group; G. Victor Treyz; Kendall P. Woodruff

(51) **Int. Cl.**
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(57) **ABSTRACT**

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USPC **349/151**; 349/149; 349/152

A display may have a thin-film-transistor layer with a substrate layer. A layer of dielectric may be formed on the substrate layer and may have an upper surface and a lower surface. The thin-film-transistor layer may include an array of display pixels. Data lines and gate lines may provide signals to the display pixels. Gate driver circuitry in an inactive peripheral portion of the display may include a gate driver circuit for each gate line. The gate driver circuits may include thin-film transistors that are formed on the upper surface of the layer of dielectric. Signal lines such as a gate low line, a gate routing line coupled between the gate driver circuits, and a common electrode line may be formed from two or more layers of metal to reduce their widths or may be embedded within the dielectric layer between the upper and lower surfaces under the thin-film transistors.

(58) **Field of Classification Search**
USPC 349/42, 43, 151, 152, 149
See application file for complete search history.

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16 Claims, 9 Drawing Sheets

